

AMENDMENTS TO THE SPECIFICATION:

Please amend the specification as follows:

Page 3, line 19 to Page 4, line 5, substitute the following paragraphs:

In accordance with a first aspect of the present invention, there is provided a throttle valve control apparatus of an internal combustion engine comprising:

a throttle valve shaft or, as hereinafter also referred to, valve throttle axis rotated by a motor-driven actuator;

an alternate magnet mounted to the throttle valve axis;

a cover to which an element for detecting a change of magnetic flux of the alternate magnet is mounted;

the cover being mounted to a throttle body to which the motor-driven actuator is mounted; and

an output of the element constituting a function of an opening degree of the throttle valve.

Page 5, paragraph 5, line 20:

wherein a rotational angle of the throttle valve axis is detected by a magnetic type throttle sensor comprising a magnet and a ~~hole~~ hall element, and the gear is formed by a resin material.

Page 6, paragraph 1, line 2:

wherein a magnetic type throttle sensor comprising a magnet and a ~~hole~~ hall element is mounted so as to be capable of detecting a rotational angle of the throttle valve axis, and

Page 6, paragraph 5, lines 16 and 19:

wherein ~~hole~~ hall elements are arranged at positions facing to each other with respect to the magnet and a stator corresponding to a magnetic path is attached between the ~~hole~~ hall elements, and

Page 6, paragraph 6, line 21:

wherein the motor is mounted to a position a uniform distance apart from the both ~~hole~~ hall elements.

Page 7, paragraph 2, lines 3 and 6:

wherein ~~hole~~ hall elements are arranged at positions facing to each other with respect to the magnet and a stator corresponding to a magnetic path is attached between the ~~hole~~ hall elements, and

Page 7, paragraph 3, line 7:

wherein the both ~~hole~~ hall elements are arranged out of a circular arc having a radius corresponding to a distance between the rotary axis of the motor and a center of the throttle valve axis.

Page 7, paragraph 7, lines 19 and 22:

wherein a ~~hole~~ hall element sensitive to a change of a magnetic physical amount of the magnet and a signal processing circuit converting an

output of the ~~hole~~ hall element into a predetermined electric signal are mounted to the cover.

Page 8, paragraph 2, line 6:

wherein a magnetic type throttle sensor comprising a magnet and a ~~hole~~ hall element is mounted between an end surface of a gear fixed to the throttle valve axis and the cover so as to be capable of detecting a rotational angle of the throttle valve axis.

Page 9, paragraph 9, line 27:

Figs. 7A and 7B are views for explaining a positional relation between a motion of a magnet and a ~~hole~~ hall element.

Page 16, paragraph 5, line 21:

~~Hole~~ Hall elements 86 are mounted to a gap 87 portion between a pair of semicircular stators 83.

Page 16, paragraph 6, line 23:

Three terminals of the ~~hole~~ hall elements 86 are mechanically held to the circuit board 84 and are connected to a signal processing circuit such as an amplifier or an analogue/digital converter (not shown) arranged in the circuit board 84.

Page 17, paragraph 2, lines 6 and 7:

The ~~hole~~ hall element 86 detects a change of the magnetic field and generates a ~~hole~~ hall voltage when the throttle valve axis 3 rotates and the magnet 82 rotates.

Page 18, paragraph 1, line 7:

Accordingly, in the motor vehicle provided with the throttle control apparatus in accordance with the present embodiment, the control parameters of the engine are adjusted in correspondence to the change of electric signal which the ~~hole~~ hall element 86 outputs in connection with the opening degree of the throttle valve in response to the magnetic signal of the magnet mounted to the axial end of the throttle valve.

Page 18, paragraph 2, lines 13 and 15:

Since the sensor is a non-contact type, the opening signal of the throttle valve 4 corresponding to the change of the electric signal which the ~~hole~~ hall element 86 outputs is not expose to a secular change so much, so ~~the~~ that it is possible to accurately adjust the control parameters of the internal combustion engine for a long period.

Page 19, paragraph 1, line2:

A pair of ~~hole~~ hall elements 86 placed in the bonding surface portion of the magnetic pole output a signal forming a function of a rotational angle in response to the change of the magnetic line of force generated in correspondence to the change of the rotational angle of the throttle valve axis 3.

Page 19, paragraph 4, line 18:

Since the magnetic field is not shifted even when the shape of the gear 12 is an irregular shape such as a fan shape, a sensitive characteristic of the

~~hole~~ hall element 86 can be uniformly obtained without relation to an angle of rotation of the throttle axis.

Page 19, paragraph 5, line 20:

As shown in Fig. 5, the ~~hole~~ hall element 86 is mounted in an outer portion of an area of a circular arc S drawn around a center of rotation of the motor by setting a size between a center of the rotary axis of the motor and a center of rotation of the throttle to a radius.

Page 19, paragraph 6, line 26 and bridging page 20, line 1:

As a result, the ~~hole~~ hall element 86 is hard to be affected by an electromagnetic influence caused by a change of a drive current of the motor, and a detecting accuracy of the ~~hole~~ hall element 86 is hard to be deteriorated.

Page 19, paragraph 4, lines 20 and 22:

Since the rotational support axis 19 of the middle gear 20 positioned between the motor 22 and the magnetic type non-contact sensor 80 is made of a magnetic material, it is possible to expect an effect of shielding an electromagnetic influence caused by the change of the drive current of the motor 22 by the rotational support axis 19, so that the ~~hole~~ hall element 86 is hard to be affected by the electromagnetic influence of the motor 22, and a detecting accuracy of the ~~hole~~ hall element 86 is hard to be deteriorated.